



INSECTS AND SPIDERS FOUND IN SPANISH MOSS, GIN TRASH,
AND WOODS TRASH, AND ON WILD COTTON

By C. F. Rainwater, Division of Cotton Insect Investigations^{1/}

In the course of cotton insect investigations numerous species of insects are encountered. Ordinarily the majority of these are unknown or receive only casual attention. Some of the insects ordinarily encountered, other than those to which our attention is directed, are of more or less economic importance. The writer has had occasion to observe numerous species of insects and spiders while engaged in various cotton insect investigations, and a large number of those found in Spanish moss, gin trash, and woods trash, and on wild cotton have been collected and submitted to specialists for identification. Many of the species collected from Spanish moss and woods trash have no relation to the cotton plant, but most of those collected from gin trash and wild cotton do have such relationship, even though they may not be of economic importance.

The insects recorded herein from Spanish moss (Tillandsia usneoides L.) were all collected in Madison Parish, near Tallulah, in northeastern Louisiana. Examinations of this material have been made regularly for a number of years, late in the fall and again early in the spring, to determine the relative number of boll weevils (Anthonomus grandis Boh.) that enter hibernation and survive the winter in this material. During the fall examinations of 1930 and 1931 attempts were made to collect all the insects that

^{1/} The author is indebted to the following, who assisted in the collection of these insects: From Spanish moss, M. T. Young, G. L. Smith, G. L. Garrison, and A. L. Scales; from gin trash, T. R. Adkins; from woods trash, F. F. Bondy. Acknowledgment is also made of the following who made the determinations included in this study: A. G. Böving, E. A. Chapin, W. S. Fisher, D. G. Hall, August Busck, H. G. Barber, P. W. Oman, A. B. Gurney, H. S. Barber, L. L. Buchannan, H. B. Mills, C. A. Frost, Carl J. Drake, Halbert M. Harris, H. H. Knight, M. R. Smith, C. F. W. Muesebeck, Miss G. A. Sandhouse, R. A. Cushman, A. N. Caudell, C. T. Greene, Ross Hutchins, Carl Heinrich, O. L. Cartwright, J. N. Todd, and the late J. W. Folsom.

were present in the moss at the time the examinations were made. The moss was pulled in festoons from trees on which it grew near the edges of fields, placed in large sacks, and brought to the laboratory for examination. The moss was examined by taking a small amount at a time from the sacks, placing it on a long, flat table covered with white cloth, and carefully tearing it apart so as to dislodge the insects. Some insects were present in surprisingly large numbers while others were extremely scarce. As the writer's interest was mainly to determine the species of insects present in the moss rather than their relative numbers, no records were kept as to the scarcity or abundance of any of the insects collected, except, of course, the boll weevil. Numerous spiders were present in this moss, but no effort was made to collect them.

Each year, during the cotton ginning season, the Division of Pink Bollworm Control, Bureau of Entomology and Plant Quarantine, places portable gin-trash machines at various locations throughout the cotton belt for the purpose of detecting the presence of the pink bollworm (Pectinophora gossypiella (Saund.)). The trash separated from the cotton during the process of cleaning and ginning is run through a machine especially designed by R. E. McDonald to assist in detecting the pink bollworm. This machine is so constructed as to eliminate that portion of the trash above and below the extremes in the size of pink bollworm larvae. The remaining portion of the trash is carefully examined for pink bollworm larvae. Numerous other species of insects and spiders are present in this material. In the fall of 1932, while the writer was working in cooperation with the Division of Pink Bollworm Control, it was decided to determine which species of insects and spiders were actually present in this material. The trash was all from cotton that had been ginned in northern Florida in the vicinity of Chipley. All specimens of insects and spiders seen in two representative samples of the trash, after it had gone through the machine, were collected and sent to Washington for identification. The accompanying list shows what species were found.

During the late fall of 1932, the winter of 1932-33, and the spring of 1933, intensive surveys were made to determine the species of insects injurious to wild cotton in the southern part of Florida. The pink bollworm had already been discovered in commercially grown cotton in northern Florida, and its origin had been traced to the wild cotton which grows in large areas in southern Florida, particularly along the west coast south of Tampa, on many of the islands and keys off both the east and west coasts, on the long string of "mainland keys" south of the peninsula, to and including the island of Key West, and on some small islands southwest of Key West. The extent of wild cotton growth in Florida was largely determined during this period while the writer was working in cooperation with the Division of Pink Bollworm Control. The wild cotton of these parts of Florida is perennial in growth and often attains the size of small trees, some plants attaining a height of 30 or more feet, with diameters of from 4 to 6 inches at their bases. Specimens of the plants were identified by specialists in the Bureau of Plant Industry as Gossypium hirsutum L., the same species as our common upland cotton. The plants produce cotton abundantly, but the lint is too short to be of commercial value.

During the time that these surveys were being made an attempt was made by the writer to collect every species of insect found on this wild cotton, whether of economic importance or not. A large number of these were reared from different parts of the plant, and it is recognized that some of the insects included in the list (especially some of the *Diptera*) may have emerged from the sand which was placed in the cages rather than from the caged material. Some of the more important species found during this period have been included in a previous article. 2/

During recent years workers of the Division of Cotton Insect Investigations have examined woods trash, collected from near the edges of cotton fields during the winter months, for hibernating boll weevils. At the Florence, S. C., laboratory samples of trash are collected from different distances into the woods (up to 150 feet) from the edges of cotton fields. Each sample consists of all the surface trash from a 3 by 6 foot area, the trash being carefully raked up, placed in sacks, labeled, and brought to the laboratory for examination. Ten samples are usually taken from each field location, and as many locations are sampled during the winter as time permits. The trash material, after being brought to the laboratory, is first run through a machine designed by F. F. Bondy, which eliminates the trash larger and smaller than the boll weevils and retains that portion between these extremes in a separate compartment. The trash is then carefully examined for boll weevils by placing small quantities of it at a time on a table covered with a white cloth.

During the first winter (1936-37) of these trash examinations at Florence, the writer observed that a large number of insects other than the boll weevil were present in the trash. Consequently, during the winters of 1937-38 and 1938-39 attempts were made to collect all the species present in the trash, and it is believed that the list includes the majority of those insects likely to be found in surface woods trash in Florence County, S. C.

The amount of material available to the writer represents only a small proportion of that examined each year, especially of the gin trash. However, since any records concerning insects are of potential interest and importance in adding to our knowledge, the results are presented here.

The following list of insects and spiders represents the species found by systematic collections made in Spanish moss in northeastern Louisiana, in gin trash in northern Florida, in woods trash in South Carolina, and on wild cotton in southern Florida.

2/ Rainwater, C. F. Insects and a mite of potential economic importance found on wild cotton in Florida. Jour Econ. Ent. 27 (4): 756-761. 1934.

Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
ACARINA				
Filistata hibernalis Hentz - - - - -	-	x	-	-
Oxyopes salticus Hentz - - - - -	-	x	-	-
Pellenes sp. - - - - -	-	x	-	-
Eriophyidae				
Eriophyes gossypii Banks - - - - -	-	-	-	x
THYSANURA				
Lepisratiidae				
Thermobia domestica Pack. - - - - -	x	-	-	-
COLLEMBOLA				
Entomobryidae				
Entomobrya cubensis Fols. - - - - -	-	-	-	x
Isotoma viridis Bourlet - - - - -	-	-	x	-
Lepidocryptinus sp. - - - - -	-	-	-	x
Sira platana nigromaculata Lub. - - - - -	-	-	x	-
ORTHOPTERA				
Blattidae				
Cariblatta lutea lutea (S. and Z.) - - - - -	-	-	x	-
Ischnoptera deropeltiformis (Brunn.) - - - - -	-	-	x	-
Parcoblatta sp. - - - - -	x	-	-	-
Periplaneta fluiginosa (Serv.) - - - - -	-	-	-	x
Plectoptera poeyi (Sauss.) - - - - -	-	-	-	x
Gryllidae				
Anaxipha sp. - - - - -	-	-	x	-
Anurogryllus muticus (Deg.) - - - - -	-	-	-	x
Cycloptilum antillarum (Redt.) - - - - -	-	-	-	x
Cycloptilum squamosum Scudd. - - - - -	-	-	-	x
Cycloptilum zebra (R. and H.) - - - - -	-	-	-	x
Gryllus assimilis (F.) - - - - -	-	x	x	-
Hapithus agitator Uhler - - - - -	-	-	-	x
Tafalisca lurida Walker - - - - -	-	-	-	x
Undet. sp. - - - - -	x	-	-	-
Acrididae				
Acrydium arenosum arenosum (Burm.) - - - - -	-	-	x	-
Amblytropidia occidentalis (Sauss.) - - - - -	-	-	x	-
Oedipodinae, a species of - - - - -	-	x	-	-
Schistocerca americana (Drury) - - - - -	x	-	-	-
Tettigidea lateralis lateralis (Say) - - - - -	x	-	x	-
Mantidae				
Stagmomantis floridensis Dav. - - - - -	-	-	-	x

Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
NEUROPTERA				
Chrysopidae				
Chrysopa sp. - - - - -	x	x	-	-
Myrmeleontidae				
Undet. sp. - - - - -	-	x	-	x
CORRODENTIA				
Pscidae				
Ectopsocus pumilis (Bks.) - - - - -	-	-	x	-
Polypsocus corruptus (Hagen) - - - - -	-	-	x	-
Trogiidae				
Liposcelis divinatorius (Müll.) - - - - -	-	-	-	x
Undet. sp. - - - - -	-	-	-	x
THYSANOPTERA				
Thripidae				
Frankliniella cephalica (Crawford) - - - - -	-	-	-	x
Frankliniella tritici (Fitch) - - - - -	-	-	-	x
HOMOPTERA				
Cercopidae				
Lepyronia quadrangularis (Say) - - - - -	x	-	-	-
Membracidae				
Entylia sinuata (F.) - - - - -	-	-	x	-
Stictocephala festina (Say) - - - - -	-	-	x	-
Stictocephala sp. - - - - -	-	-	x	-
Cicadellidae				
Agallia quadripunctata (Prov.) - - - - -	-	-	x	-
Aulacizes irrorata (F.) - - - - -	x	-	-	-
A. irrorata var. pollinosa Fowl. - - - - -	-	-	-	x
Gypona sp. - - - - -	-	-	x	-
Homalodisca triquetra (F.) - - - - -	x	-	-	-
Oncometopia lateralis (F.) - - - - -	x	-	-	-
Oncometopia undata (F.) - - - - -	x	-	-	x
Phlepsius excultus (Uhl.) - - - - -	-	-	x	-
Fulgoridae				
Cyrpoptus sp. - - - - -	-	-	x	-
Aphiidae				
Aphis gossypii Glov. - - - - -	-	-	-	x
Coccidae				
Phenacoccus gossypii (T. and C.) - - - - -	-	-	-	x
Pseudococcus maritimus (Ehrh.) - - - - -	-	-	-	x
Pseudococcus sp. - - - - -	-	-	-	x
Saissetia oleae (Bern.) - - - - -	-	-	-	x

Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
HETEROPTERA				
Scutelleridae				
<i>Diolcus chrysorrhoeus</i> (F.) - - - - -	x	-	-	-
<i>Stethaulax marmoratus</i> (Say) - - - - -	-	-	x	-
Cydniidae				
<i>Aethus communis</i> Uhler - - - - -	-	-	x	-
<i>Allocoris gillettii</i> VanD. - - - - -	-	-	x	-
<i>Amnestus spinifrons</i> (Say) - - - - -	-	-	x	-
<i>Calgupha atra</i> (A. and S.) - - - - -	-	-	x	-
<i>Calgupha nitiduloides</i> (Wolff) - - - - -	-	-	x	-
<i>Ceccnethus cavicollis</i> (Blatch.) - - - - -	-	-	x	-
<i>Fangaeus bilineatus</i> (Say) - - - - -	-	-	x	-
<i>Fangaeus uhleri</i> Sign. - - - - -	-	x	-	-
<i>Sehirus cinctus</i> (P. B.) - - - - -	-	-	x	-
Pentatomidae				
<i>Acrosternum hilare</i> (Say) - - - - -	x	-	x	-
<i>Eanasa calva</i> (Say) - - - - -	-	-	x	-
<i>Eanasa dimidiata</i> (Say) - - - - -	x	-	x	-
<i>Eanasa euchlora</i> Stal - - - - -	x	-	-	-
<i>Brochymena arborea</i> (Say) - - - - -	x	-	-	-
<i>Brochymena myops</i> Stal - - - - -	x	-	-	-
<i>Brochymena quadripustulata</i> (F.) - - - - -	x	-	-	-
<i>Cosmopepla bimaculata</i> (Thom.) - - - - -	x	-	-	-
<i>Edessa bifida</i> (Say) - - - - -	x	-	-	-
<i>Euschistus tristigmus</i> (Say) - - - - -	-	-	x	-
<i>Euthyrhynchus floridanus</i> (L.) - - - - -	x	-	-	-
<i>Mormidea lugens</i> (F.) - - - - -	-	-	x	-
<i>Murgantia histrionica</i> (Hahn) - - - - -	-	-	x	-
<i>Nezara viridula</i> (L.) - - - - -	x	x	-	-
<i>Peribalus limbolarius</i> Stal - - - - -	-	-	x	-
<i>Podisus maculiventris</i> (Say) - - - - -	x	-	x	-
<i>Podisus mucronatus</i> Uhl. - - - - -	-	-	-	x
<i>Solubea pugnax</i> (F.) - - - - -	-	-	x	-
<i>Stiretrus anchorago</i> (F.) - - - - -	x	-	x	-
<i>Thyanta calceata</i> (Say) - - - - -	-	-	x	-
<i>Undet. sp.</i> - - - - -	x	-	-	-
Coreidae				
<i>Acanthocephala declivis</i> (Say) - - - - -	x	-	-	-
<i>Acanthocephala terminalis</i> (Dall.) - - - - -	x	-	-	-
<i>Anasa tristis</i> (Dég.) - - - - -	x	-	-	-
<i>Chariesterus antennator</i> (F.) - - - - -	x	-	-	-
<i>Corizus</i> (<i>Stictopleurus</i>) <i>punctiventris</i> (Dall.) - - - - -	x	-	-	-
<i>Corizus</i> (<i>Liorhyssus</i>) <i>hyalinus</i> (F.) - - - - -	x	-	-	-
<i>Corizus</i> (<i>Arhyssus</i>) <i>lateralis</i> (Say) - - - - -	x	-	x	-
<i>Corizus</i> (<i>Niesthrea</i>) <i>sidæ</i> (F.) - - - - -	-	-	x	-
<i>Harmostes fraterculus</i> (Say) - - - - -	x	-	-	-
<i>Harmostes reflexulus</i> (Say) - - - - -	-	-	x	-
<i>Jadera haematoloma</i> (H.-S.) - - - - -	x	-	-	-
<i>Leptoglossus phyllopus</i> (L.) - - - - -	x	-	-	x

Species collected	Spanish moss (La.)	Gin' trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
HETEROPTERA (Con.)				
Aradidae				
Aradus sp. - - - - -	-	-	x	-
Mezira granulata (Say)- - - - -	-	-	x	-
Lygaeidae				
Aphanus umbrosus (Dist.) - - - - -	x	-	x	-
Blissus leucopterus (Say) - - - - -	-	-	x	-
Cryphula parallelogramma Stal - - - - -	-	-	x	-
Cymus angustatus Stal - - - - -	-	-	x	-
Drymus crassus VanD. - - - - -	-	-	x	-
Eremocoris ferus (Say) - - - - -	-	-	x	-
Eremocoris setosus Blatch. - - - - -	-	-	x	-
Eremocoris depressus Barb. - - - - -	-	-	x	-
Geccoris uliginosus (Say) - - - - -	-	-	x	-
G. uliginosus lateralis (Fieb.) - - - - -	-	-	x	-
Heraeus plebejus Stal - - - - -	-	-	x	-
Ischnorhynchus resedae (Panz.) - - - - -	x	-	x	-
Lygaeus bicrucis Say - - - - -	x	-	x	-
Myodocha serripes Oliv. - - - - -	-	-	x	-
Nysius californicus Stal - - - - -	x	-	x	-
N. californicus alabamensis Baker - - - - -	-	-	x	-
Oedancala dorsilinea A. and S. - - - - -	-	-	x	-
Oncopeltus fasciatus (Dall.) - - - - -	x	-	-	-
Orthaea basalis (Dall.) - - - - -	-	-	x	-
Orthaea bilobata (Say) - - - - -	-	-	x	-
Orthaea servillei (Guer.) - - - - -	-	-	x	-
Ortholomus sp. - - - - -	x	-	-	-
Ozophora picturata Uhler - - - - -	-	-	x	-
Paromius longulus (Dall.) - - - - -	-	-	x	x
Phlegyas abbreviatus (Uhler) - - - - -	-	-	x	-
Ptochiomera nodosa (Say) - - - - -	-	-	x	-
Undet. sp. - - - - -	-	-	x	-
Pyrrhocoridae				
Euryopthalmus succinctus (L.)- - - - -	x	-	x	-
Dysdercus andreae (L.) - - - - -	-	-	-	x
Dysdercus suturellus H.-S. - - - - -	-	-	-	x
Tingitidae				
Corythucha associata O. and D.- - - - -	-	-	x	-
Corythucha mollicula O. and D.- - - - -	x	-	-	-
Phymatidae				
Phymata albopicta Handl. - - - - -	-	-	x	-
Phymata sp. - - - - -	x	-	-	-
Reduviidae				
Atrachelus cinereus (F.) - - - - -	-	-	x	-
Melanolestes picipes (H.-S.) - - - - -	x	-	-	-
Oncerothachelus acuminatus (Say)- - - - -	-	-	x	-
Schumannia shermani Barb. - - - - -	-	-	x	-

Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
HETEROPTERA (Con.)				
Reduviidae (Con.)				
Sinea spinipes (H.-S.) - - - - -	x	-	-	-
Zelus bilotus Say - - - - -	-	-	-	x
Zelus socius Uhl. - - - - -	x	-	-	-
Zelus sp. - - - - -	x	sp.	-	-
Nabidae				
Nabis capsiformis Germ. - - - - -	-	-	x	-
Nabis deceptivus Harris - - - - -	-	-	x	-
Nabis roseipennis Reuter - - - - -	-	-	x	-
Nabis rufusculus Reuter - - - - -	-	-	x	-
Nabis sordidus Reuter - - - - -	-	-	x	-
Anthocoridae				
Orius insidiosus (Say) - - - - -	-	-	-	x
Paratriphleps pallidus (Reuter) - - - - -	-	-	-	x
Miridae				
Lygus apicalis Fieb. - - - - -	x	-	-	-
Lygus pratensis oblineatus (Say) - - - - -	x	-	x	-
Lygus rubicundus (Fall.) - - - - -	x	-	-	-
Rhinacloa subpallicornis Knight - - - - -	-	-	-	x
Ochteridae				
Ochterus americanus (Uhl.) - - - - -	-	-	x	-
DERMAPTERA				
Forficulidae				
Doru lineare (Esch.) - - - - -	-	-	-	x
Labiduridae				
Euborellia annulipes (Lucas) - - - - -	-	x	-	-
COLEOPTERA				
Carabidae				
Acupalpus longulus Dej. - - - - -	-	-	x	-
Acupalpus ochropezus Say - - - - -	-	-	x	-
Agonoderus indistinctus (Dej.) - - - - -	-	-	x	-
Agonoderus testaceus (Dej.) - - - - -	-	-	x	-
Agonum albicrus (Dej.) - - - - -	-	-	x	-
Agonum octopunctatum (F.) - - - - -	-	-	x	-
Agonum tenue (Lec.) - - - - -	-	-	x	-
Agonum sp. - - - - -	-	-	x	-
Amara (Amara) cupreolata Putz. - - - - -	-	-	x	-
Amara (Celia) muscula (Say) - - - - -	-	-	x	-
Amara sp. - - - - -	-	-	x	-
Anchomenus cincticollis Say - - - - -	x	-	-	-
Anisodactylus laetus Dej. - - - - -	-	-	x	-
Anisodactylus (Triplex) merula (Germ.) - - - - -	-	x	-	-
Anisodactylus nigerrimus (Dej.) - - - - -	-	-	x	-

Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
COLEOPTERA (Con.)				
Carabidae (Con.)				
Anisodactylus (Tripectrus)				
rusticus (Say)	-	-	x	-
Anisodactylus sp.	-	-	x	-
Anisotarsus sp.	x	-	-	-
Apenes sinuata (Say)	x	-	x	-
Apristus subsulcatus (Dej.)	-	x	-	-
Badister reflexus Lec.	-	-	x	-
Brachinus sp.	x	-	-	-
Calathus opaculus Lec.	-	-	x	-
Callida punctata Lec.	x	-	-	-
Carabus vinctus Web.	-	-	x	-
Carabus sp.	-	-	x	-
Clivina americana Dej.	-	-	x	-
Clivina bipustulata (F.)	-	-	x	-
Clivina sp.	-	-	x	-
Colliuris pennsylvanica (L.)	-	-	x	-
Dyschirius sp.	-	-	x	-
Harpalus gemmeus Csy.	-	-	x	-
Harpalus fulgens Csiki	x	-	-	-
Harpalus sp.	-	-	x	-
Helluomorpha nigripennis (Dej.)	-	-	x	-
Lebia analis Dej.	x	-	x	-
Lebia ornata Say	-	-	x	-
Lebia pulchella Dej.	-	-	x	-
Lebia viridis Say	-	-	x	-
Leptotrachelus dorsalis (F.)	-	-	x	-
Loxandrus parallelus Csy.	-	-	x	-
Loxandrus sp.	-	-	x	-
Nomius pygmaeus (Dej.)	-	-	x	-
Notiophilus novemstriatus Lec.	-	-	x	-
Panagaeus fasciatus Say	x	-	-	-
Pinacodera limbata (Dej.)	-	-	x	-
Selenophorus opalinus Lec.	-	-	x	-
Selenophorus sp.	-	-	x	-
Tachys sp.	-	-	x	-
Tachyura sp.	-	-	x	-
Tetragonoderus intersectus (Germ.)	-	-	x	-
Trichotichnus autumnalis (Say)	-	-	x	-
Undet. sp.	-	-	x	-
Silphidae				
Anistoma sp.	-	-	x	-
Leiodes sp.	-	-	x	-
Ptomophagus consobrinus (Lec.)	-	-	x	-
Staphylinidae				
Acidota crenata (F.)	-	-	x	-
Actobius parvus Horn	-	-	x	-
Aderocharis corticinus (Grav.)	-	-	x	-

Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild Cotton (Fla.)
COLEOPTERA (Con.)				
Staphylinidae (Con.)				
Aleocharinae sp. - - - - -	-	-	x	-
Astenus prolixus (Er.) - - - - -	-	-	x	-
Atheta sp. - - - - -	-	-	x	-
Bolitobius cinctus (Grav.) - - - - -	-	-	x	-
Bryoporus rufescens Lec. - - - - -	-	-	x	-
Conosoma putescens (Payk.) - - - - -	-	-	x	-
Conosoma sp. - - - - -	-	-	x	-
Coproporus laevis (Lec.) - - - - -	-	-	x	-
Cryptobium sp. - - - - -	-	-	x	-
Gastrobium bicolor (Grav.) - - - - -	-	-	x	-
Hesperobium sp. - - - - -	-	-	x	-
Hesperobium cinctum (Say) - - - - -	-	-	x	-
Lathrobiella sp. - - - - -	-	-	x	-
Lathrobium sp. - - - - -	-	-	x	-
Lathrobiini sp. - - - - -	-	-	x	-
Mycetoporus consors Lec. - - - - -	-	-	x	-
Mycetoporus flavicollis Lec. - - - - -	-	-	x	-
M. flavicollis pictus Horn - - - - -	-	-	x	-
Palaminus luteus Csy. - - - - -	-	-	x	-
Palaminus sp. - - - - -	-	-	x	-
Philonthus lomatus Er. - - - - -	-	-	x	-
Philonthus sordidus (Grav.) - - - - -	-	-	x	-
Philonthus sp. - - - - -	-	-	x	-
Pinophilus opacus Lec. - - - - -	-	-	x	-
Quedius molochinus (Grav.) - - - - -	-	-	x	-
Quedius sp. - - - - -	-	-	x	-
Staphylinus cinnamopterus Grav. - - - - -	x	-	-	-
Staphylinus tomentosus Grav. - - - - -	-	-	x	-
Staphylinus sp. - - - - -	-	-	x	-
Staphylinus n. sp. - - - - -	-	-	x	-
Stilicus dentatus Say - - - - -	-	-	x	-
Tachyporus sp. - - - - -	-	-	x	-
Tetartopeus angularis (Lec.) - - - - -	-	-	x	-
Tilea thoracicus Oliv. - - - - -	x	-	-	-
Pselaphidae				
Undet. sp. - - - - -	-	-	x	-
Scaphidiidae				
Baeocera speculifer Csy. - - - - -	-	-	x	-
Baeocera sp. - - - - -	-	-	x	-
Scaphidium quadriguttatum Say - - - - -	-	-	x	-
S. quadriguttatum piceum Melsh. - - - - -	-	-	x	-
Undet. sp. - - - - -	-	-	x	-

Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
COLEOPTERA (Con.)				
Histeridae				
Hister sedecimstriatus Say	-	-	x	-
Hister sp.	-	-	x	-
Onthophilus alternatus (Say)	-	-	x	-
Phelister subrotundus (Say)	-	-	x	-
Phelister sp.	-	-	x	-
Saprinus placidus Er.	-	-	x	-
Saprinus sp.	-	-	x	-
Lampyridae				
Pyraclomena sp.	-	-	x	-
Cantharidae				
Cantharis bilineatus Say	x	-	-	-
Melyridae				
Anthocomus erichsoni Lec.	x	-	-	-
Collops sp.	-	x	-	-
Cleridae				
Cymatodera undulata (Say)	x	-	-	-
Enoclerus ichneumoneus (F.)	x	-	-	-
Oedemeridae				
Asclera puncticollis (Say)	x	-	-	-
Anthicidae				
Anthicus vicinus Laf.	-	x	-	-
Notoxus bicolor (Say)	-	-	x	-
Notoxus monodon (F.)	-	-	x	-
Tomoderus constrictus (Say)	-	-	x	-
Euglenidae				
Zonates signatus (Hald.)	-	-	x	-
Elateridae				
Aeolus sp.	-	x	-	-
Cardiophorus angustatus Bl.	-	-	x	-
Conoderus suturalis Lec.	x	-	-	-
Conoderus auritus (Hbst.)	-	-	x	-
Glyphonyx reticulatus (Say)	-	-	x	-
Glyphonyx quietus (Say)	x	-	-	-
Glyphonyx testaceus (Melsh.)	-	-	x	-
Glyphonyx sp.	-	-	x	-
Heteroderes laurentii Guer.	-	x	-	-
Horistonotus curiatus (Say)	-	-	x	-
Hypnoidus perplexus Horn.	-	-	x	-
Lacon rectangularis (Say)	-	x	-	-
Limonius aeger Lec.	-	-	x	-
Limonius basillaris (Say)	-	-	x	-
Limonius quercinus (Say)	-	-	x	-
Melanotus communis (Gyll.)	-	-	x	-
Melanotus insipiens (Say)	-	-	x	-
Melanotus sp.	-	-	x	x
Sericus silaceus (Say)	-	-	x	-

Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
COLEOPTERA (Con.)				
Buprestidae				
Chrysobothris chrysoela (Ill.)	- - - - -	-	x	-
Dicerca obscura (F.)	- - - - -	x	-	-
Heloidae				
Cyphon perplexus Blatch.	- - - - -	-	-	x
Ora sp.	- - - - -	-	-	x
Dermestidae				
Attagenus (piceus Oliv.?)	- - - - -	-	x	-
Rhysodidae				
Rhysodes americanus Lap.	- - - - -	x	-	-
Ostomidae				
Tenebroides bimaculatus (Melsh.)	- - - - -	x	-	-
Nitidulidae				
Carpophilus antiquus (Melsh.)	- - - - -	-	x	-
Carpophilus dimidiatus F.	- - - - -	-	x	-
C. dimidiatus var. luridus Murr.	- - - - -	-	-	x
Carpophilus sp.	- - - - -	-	x	-
Colopterus unicolor (Say)	- - - - -	-	-	x
Conotelus obscurus Er.	- - - - -	-	-	x
Haptoncus luteolus (Er.)	- - - - -	-	-	x
Pallodes silaceus (Er.)	- - - - -	-	x	-
Stelidota geminata Say	- - - - -	-	x	-
Stelidota octomaculata (Say)	- - - - -	-	x	-
Stelidota sp.	- - - - -	-	x	-
Urophorus humeralis F.	- - - - -	-	x	-
Undet. sp.	- - - - -	-	-	x
Cucujidae				
Ahasverus rectus (Lec.)	- - - - -	-	x	-
Cathartus quadricollis (Guer.)	- - - - -	-	x	x
Telephanus velox (Hald.)	- - - - -	-	x	-
Erotylidae				
Languria mozardi Latr.	- - - - -	-	x	-
Tritoma affinis Lac.	- - - - -	-	x	-
Tritoma angulata Say	- - - - -	-	x	-
Tritoma erythrocephala Lac.	- - - - -	-	x	-
Tritoma humeralis F.	- - - - -	-	x	-
Tritoma sanguinipennis (Say)	- - - - -	-	x	-
Cryptophagidae				
Cryptophagus sp.	- - - - -	-	x	-
Loberus imbellis Casey	- - - - -	-	-	x
Lathridiidae				
Melanophthalma cavicollis Mann.	- - - - -	-	x	-
Endomychidae				
Aphorista vittata (F.)	- - - - -	-	x	-
Lycoperdina ferruginea Lec.	- - - - -	-	x	-
Mycetina testacea (Ziegl.)	- - - - -	-	x	-

Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
COLEOPTERA (Con.)				
Phalacridae				
Acylomus carbonarius Csy. - - - - -	-	-	-	x
Acylomus sp. - - - - -	-	-	x	-
Phalacrus politus Melsh. - - - - -	x	-	-	-
Phalacrus sp. - - - - -	-	-	x	-
Undet. sp. - - - - -	-	-	x	-
Coccinellidae				
Axiol. pilatei Muls. - - - - -	x	-	-	-
Brachyacantha basalis Melsh. - - - - -	-	-	x	-
Colcomegilla fuscilabris (Muls.) - - - - -	x	-	x	-
Cycloneda immaculata (F.) - - - - -	-	-	x	-
Cycloneda munda (Say) - - - - -	-	-	x	-
Cycloneda sanguinea (L.) - - - - -	-	-	x	-
Epilachna borealis (F.) - - - - -	x	-	-	-
Epilachna varivestis Muls. - - - - -	-	-	x	-
Exochomus marginipennes var. latiusculus Csy. - - - - -	-	-	-	x
Hippodamia convergens (Guer.) - - - - -	-	x	-	-
Hyperaspis binotata (Say) - - - - -	x	-	-	-
Hyperaspis proba (Say) - - - - -	-	-	x	-
Neoharmonia venusta (Melsh.) - - - - -	x	-	-	-
Neomysia pullata (Say) - - - - -	x	-	-	-
Olla plagiata Csy. - - - - -	x	-	-	-
Scymnus americanus Muls. - - - - -	-	-	x	-
Scymnus bivulnerus Horn - - - - -	-	-	-	x
Scymnus terminatus Say - - - - -	-	-	-	x
Scymnus sp. - - - - -	-	-	x	-
Alleculidae				
Hymen ⁹ erus densus Lec. - - - - -	-	-	-	x
Lobopoda erythrocnemis (Germ.) - - - - -	x	-	-	-
Tenebrionidae				
Alphitobius sp. - - - - -	-	x	-	-
Blapstinus alutaceus Csy. - - - - -	-	-	-	x
Blapstinus metallicus (F.) - - - - -	-	x	x	-
Crypticus obsoletus Say - - - - -	-	-	x	x
Eutochia picea (Melsh.) - - - - -	-	x	-	-
Gnathocerus cornutus (F.) - - - - -	-	x	-	-
Leichenum variegatum Kust. - - - - -	-	x	-	-
Opatrinus aciculatus Lec. - - - - -	x	-	x	-
Palorus ratzeburgi (Wissm.) - - - - -	-	x	-	-
Platydema orenatum Lec. - - - - -	-	-	x	-
Platydema excavatum (Say) - - - - -	x	-	-	-
Platydema micans Horn - - - - -	-	-	x	-
Platydema ruficollis Cast. and Brill. - - - - -	-	-	x	-
Platydema sp. - - - - -	-	-	x	-
Tribolium castaneum (Hbst.) - - - - -	-	x	x	-
Uloma imberbis Lec. - - - - -	-	-	x	-
Uloma punctulata Lec. - - - - -	-	-	-	-

Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
COLEOPTERA (Con.)				
Lagriidae				
Anaedus brunneus (Ziegl.) - - - - -	-	-	x	-
Ancbiidae				
Caenocara oculata (Say) - - - - -	-	-	x	-
Caenocara sp. - - - - -	-	-	x	-
Lasioderma serricorne F. - - - - -	-	x	-	-
Monommidae				
Hyporhagus punctulatus Thom. - - - - -	x	-	-	-
Ptinidae				
Ptinus bimaculatus Melsh. - - - - -	x	-	-	-
Bostrichidae				
Micrapate dinoderoides (Horn) - - - - -	x	-	-	-
Scarabaeidae				
Anomala lucicola (F.) - - - - -	-	-	-	x
Aphodius campestris Blatch. - - - - -	-	-	x	-
Aphodius distinctus (Mull.) - - - - -	-	-	x	-
Aphodius stupidus Horn - - - - -	-	-	x	-
Aphodius terminalis Say - - - - -	-	-	x	-
Ataenius anticus Fall - - - - -	-	-	x	-
Ataenius cognatus Lec. - - - - -	-	x	-	-
Ataenius erratus Fall - - - - -	-	-	x	-
Ataenius leonti Harold - - - - -	-	-	x	-
Ataenius schwarzi Linell - - - - -	-	-	x	-
Ataenius strigatus Say - - - - -	-	-	x	-
Ataenius sp. - - - - -	-	-	x	-
Canthon nigricornis (Say) - - - - -	-	-	x	-
Canthon viridis (Beauv.) - - - - -	-	-	x	-
Choeridium histeroides (Web.) - - - - -	-	-	x	-
Choeridium leonti Harold - - - - -	-	-	x	-
Cloeotus globosus (Say) - - - - -	x	-	-	-
Diplotaxis excavata Lec. - - - - -	-	-	x	-
Diplotaxis liberta (Germ.) - - - - -	-	-	x	-
Diplotaxis sordida (Say) - - - - -	-	-	x	-
Euphoria sepulchralis F. - - - - -	-	-	-	x
E. sepulchralis floridana Csy. - - - - -	-	-	-	x
Ochodaeus musculus (Say) - - - - -	-	-	x	-
Ochodaeus sp. - - - - -	-	-	x	-
Odontaeus alabamensis Wallis - - - - -	-	-	x	-
Odontaeus darlingtoni Wallis - - - - -	-	-	x	-
Onthophagus cribricollis Horn - - - - -	-	-	x	-
Onthophagus hecate (Panz.) - - - - -	-	-	x	-
Onthophagus protensus Muls. - - - - -	-	-	x	-
Onthophagus striatulus Palis. - - - - -	-	-	x	-
Onthophagus tuberculifrons Har. - - - - -	-	-	x	-
Pleurophorus parvulus (Chev.) - - - - -	-	-	x	-
Serica aspera Dawson - - - - -	-	-	x	-

Species collected	Spanish moss (La.)	Gin' trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
COLEOPTERA (Con.)				
Scarabaeidae (Con.)				
<i>Serica atracapilla</i> (Kirby)	-	-	x	-
<i>Serica intermixta</i> Blatch.	-	-	x	-
<i>Serica sericea</i> (Ill.)	-	-	x	-
<i>Serica trocifformis</i> Burm.	-	-	x	-
<i>Serica</i> sp.	-	-	x	-
<i>Trox erinaceus</i> Lec.	-	-	x	-
Cerambycidae				
<i>Ataxia crypta</i> (Say)	x	-	-	x
<i>Chion cinctus</i> (Drury)	x	-	-	-
<i>Elaphidion</i> sp.	-	-	-	x
<i>Molorchus bimaculatus semustus</i> Newm.	x	-	-	-
<i>Plectromerus dentipes</i> (Oliv.)	-	-	-	x
<i>Spalacopsis scapalis</i> Csy.	-	-	-	x
<i>Tilloclytus geminatus</i> (Hald.)	x	-	-	-
Chrysomelidae				
<i>Altica carinata</i> Germ.	x	-	-	-
<i>Altica chalybea</i> Ill.	x	-	-	-
<i>Altica rufa</i> Ill.	-	-	x	-
<i>Baliosus ruber</i> (Web.)	-	-	x	-
<i>Calligrapha bigsbyana</i> (Kby.)	x	-	-	-
<i>Cerotoma trifurcata</i> (Först.)	-	-	x	-
<i>Chaetocnema confinis</i> Cr.	-	-	x	-
<i>Chalcoides helxines</i> Auct.	-	-	x	-
<i>Chalepus bicolor</i> (Oliv.)	-	-	x	-
<i>Chirida guttata</i> (Oliv.)	-	-	x	-
<i>Chlamys gibbosa</i> (F.)	-	-	x	-
<i>Chrysomela scripta</i> F.	x	-	-	-
<i>Colaspis brunnea</i> Auct.	-	-	x	-
<i>Cryptocephalus venustus simplex</i> Hald.	-	x	-	-
<i>Diabrotica duodecimpunctata</i> (F.)	x	-	x	-
<i>Diabrotica vittata</i> (F.)	-	-	x	-
<i>Disonycha admirabila</i> Blatch.	-	-	x	-
<i>Disonycha caroliniana</i> (F.)	-	-	x	-
<i>Disonycha glabrata</i> (F.)	-	-	x	-
<i>Disonycha pennsylvanica</i> (Ill.)	x	-	-	-
<i>Donacia subtilis</i> Kunze	-	-	x	-
<i>Galerucella rufosanguinea</i> (Say)	-	-	x	-
<i>Galerucella notulata</i> (F.)	-	-	x	-
<i>Galerucella</i> sp.	-	-	x	-
<i>Graphops varians</i> Lec.	-	-	x	-
<i>Graphops</i> sp.	-	-	x	-
<i>Labidomera clivicolis</i> (Kby.)	x	-	-	-
<i>Metriona bicolor</i> (F.)	x	-	-	-
<i>Metriona bivittata</i> (Say)	-	-	x	-
<i>Myochrous denticollis</i> (Say)	x	-	-	-

Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
COLEOPTERA (Con.)				
Chrysomelidae (Con.)				
Myochrous floridanus Schaeff. - - - - -	-	-	x	-
Myochrous sp. - - - - -	-	-	x	-
Oedionychis circumdata (Rand.) - - - - -	x	-	x	-
Oedionychis obsidiana (F.) - - - - -	-	-	x	-
Oedionychis scalaris (Melsh.) - - - - -	-	-	x	-
Oedionychis sexmaculata (Ill.) - - - - -	-	-	x	-
Oedionychis quercata (F.) - - - - -	-	-	x	-
Oedionychis sp. - - - - -	-	-	x	-
Paria canella (F.) - - - - -	x	-	x	-
Paria canella aterrima (Oliv.) - - - - -	x	-	x	-
Paria canella gilvipes (Horn.) - - - - -	-	-	x	-
Paria canella quadriguttata Lec. - - - - -	x	-	-	-
Paria sp. - - - - -	-	-	x	-
Bruchidae				
Acanthoscelides cruentatus (Horn) - - - - -	x	-	-	-
Acanthoscelides hibisci (Oliv.) - - - - -	x	-	-	-
Amblycerus robiniae (F.) - - - - -	x	-	-	-
Zabrotes sp. - - - - -	-	-	x	-
Anthribidae				
Araecerus fasciculatus Deg. - - - - -	-	x	-	-
Brachytarsoides sticticus (Boh.) - - - - -	-	-	x	-
Neanthribus cornutus (Say) - - - - -	x	-	-	-
Ormiscus floridanus (Leng) - - - - -	-	-	-	x
Curculionidae				
Acalles sp. - - - - -	-	-	-	x
Acanthoscelidius sp. - - - - -	-	-	x	-
Anthonomus grandis Boh. - - - - -	x	x	x	-
Anthonomus suturalis Lec. - - - - -	x	-	x	-
Anthonomus nigrinus Boh. - - - - -	x	-	-	-
Anthonomus sp. - - - - -	-	x	-	-
Artipus floridanus Horn - - - - -	-	-	-	x
Calendra parvula (Gyll.) - - - - -	-	-	x	-
Centrinaspis picumnus (Hbst.) - - - - -	-	-	x	-
Centrinaspis sp. - - - - -	-	-	x	-
Cercopeus chrysorhoeus (Say) - - - - -	-	-	x	-
Cercopeus sp. - - - - -	-	-	x	-
Ceutorhynchus rapae Gyll. - - - - -	-	-	x	-
Chalcodermus aeneus Boh. - - - - -	-	-	x	-
Chalcodermus collaris Horn - - - - -	-	-	x	-
Chalcodermus inaequicollis Horn - - - - -	-	-	x	-
Conotrachelus albicinctus Lec. - - - - -	-	-	x	-
Conotrachelus anaglypticus (Say) - - - - -	x	-	x	-
Conotrachelus cribricollis (Say) - - - - -	-	-	x	-
Conotrachelus elegans (Say) - - - - -	-	-	x	-
Conotrachelus naso Lec. - - - - -	-	-	x	-

Species collected	Spanish moss (La.)	Gin. trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
COLEOPTERA (Con.)				
Curculionidae (Con.)				
Conotrachelus posticatus (Say) - - - - -	-	-	x	-
Conotrachelus seniculus Lec. - - - - -	x	-	-	-
Conotrachelus sp. - - - - -	-	-	x	-
Dereolomus basalis (Lec.) - - - - -	-	-	-	x
Epicaerus formidolosus Boh. - - - - -	-	x	-	-
Eudiagogus rosenchoeldi Fahr. - - - - -	x	-	-	-
Gelus oculatus (Say) - - - - -	-	-	x	-
Hylobius pales (Hbst.) - - - - -	-	-	x	-
Limnobarus sp. - - - - -	-	-	x	x
Listroderes obliquus Gyll. - - - - -	-	-	x	-
Listronotus callosus Lec. - - - - -	x	-	-	-
Lixus marginatus (Say) - - - - -	x	-	-	-
Oligolochus ornatus Csy. - - - - -	-	-	x	-
Pachnaeus litus (Germ.) - - - - -	-	-	-	x
Pandeleteius hilaris (Hbst.) - - - - -	x	-	-	-
Pantomorus godmani (Crotch) - - - - -	-	-	x	-
Plocetes ulmi Lec. - - - - -	x	-	-	-
Pterocolus ovatus (F.) - - - - -	-	-	x	-
Rhinomacer elongatus Lec. - - - - -	-	-	x	-
Rhodobaenus 13-punctatus (Ill.) - - - - -	-	-	x	-
Sitophilus oryza (L.) - - - - -	-	x	x	-
Sternochetus fallax (Lec.) - - - - -	x	-	-	-
Sternochetus fuscatus (Lec.) - - - - -	x	-	-	-
Sternochetus obtentus (Hbst.) - - - - -	x	-	-	-
Tachypterellus quadrigibbus (Say) - - - - -	-	-	x	-
Tyloderma maculata Blatch. - - - - -	-	-	x	-
Tylopteris pallidus Lec. - - - - -	x	-	-	-
Scolytidae				
Stephanoderes georgiae Hopk. - - - - -	-	-	-	x
LEPIDOPTERA				
Gelechiidae				
Pectinophora gossypiella (Saund.) - - - - -	-	-	-	x
Nepticulidae				
Nepticula gossypii Forbes and Leonard - - - - -	-	-	-	x
Tineidae				
Undet. sp. - - - - -	-	x	-	-
Cosmopterygidae				
Pyroderces rileyi (Wlsm.) - - - - -	-	-	-	x
Pyroderces sp. (rileyi (Wlsm.)?) - - - - -	-	x	-	-
Pyroderces sp. - - - - -	-	x	-	x
Gelechiidae				
Undet. sp. - - - - -	-	x	-	-
Blastobasidae				
Holococera sp. - - - - -	-	-	-	x

Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
LEPIDOPTERA (Con.)				
Tortricidae				
Cacoecia sp. - - - - -	-	x	x	-
Platynota rostrana (Walker) - - - - -	-	x	-	-
Undet. sp. - - - - -	-	x	-	-
Pyralididae				
Aglossa sp. (cuperalis (Hbn.)?) - - - - -	-	x	-	-
Aglossa sp. - - - - -	-	x	-	-
Aglossa or Herculia spp. - - - - -	-	x	-	-
Elasmopalpus sp. (lignosellus (Zell.)?) - - - - -	-	x	-	-
Ephestia sp. - - - - -	-	x	-	-
Epipaschiinae sp. - - - - -	-	x	-	-
Lipocosma sp. - - - - -	-	x	-	-
Phycitinae sp. - - - - -	-	x	-	-
Plodia interpunctella (Hbn.) - - - - -	-	x	-	-
Pyralis farinalis (L.) - - - - -	-	x	-	-
Pyraustinae sp. - - - - -	-	x	-	-
Rhodoneura terminalis (Walker) - - - - -	-	-	-	x
Undet. sp. - - - - -	-	x	-	-
Saturniidae				
Tropaea luna (L.) - - - - -	x	-	-	-
Geometridae				
Undet. sp. - - - - -	x	-	-	-
Noctuidae				
Alabama argillacea (Hbn.) - - - - -	-	x	-	-
Anomis impasta Gn. - - - - -	-	-	-	x
Anomis sp. - - - - -	-	-	-	x
Autographa sp. - - - - -	-	-	-	x
Epizuxis sp. - - - - -	-	x	-	-
Erebinae sp. - - - - -	-	x	-	-
Heliothis armigera (Hbn.) - - - - -	-	x	-	-
Polia renigera (Steph.) - - - - -	-	x	-	-
Polia spp. - - - - -	-	x	-	-
Prodenia sp. - - - - -	-	x	-	x
Undet. sp. - - - - -	x	-	-	-
Arctiidae				
Isia isiabella (A. and S.) - - - - -	x	-	-	-
Undet. sp. - - - - -	x	-	-	-
Lycaenidae				
Strymon melinus Hbn. - - - - -	-	x	-	-
DIPTERA				
Tipulidae				
Tipula sp. - - - - -	x	-	-	-
Ceratopogonidae				
Culicoides sp. - - - - -	-	-	-	x
Forcipomyia erucicida Knab. - - - - -	-	-	-	x
Forcipomyia propinqua (Will.) - - - - -	-	-	-	x

Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
DIPTERA (Con.)				
Cecidomyiidae				
Contarinia gossypii Felt	-	-	-	x
Undet. sp.	-	-	-	x
Sciaridae				
Sciara sp.	-	-	x	x
Therevidae				
Psilocephala morata Coq.	-	-	-	x
Scenopinidae				
Undet. sp.	-	x	-	-
Dolichopodidae				
Psilopus sp.	-	-	-	x
Phoridae				
Megaselia sp.	-	-	-	x
Pulciphora borinquensis Wheeler	-	-	-	x
Syrphidae				
Undet. sp.	-	-	-	x
Sarcophagidae				
Undet. spp.	x	-	-	-
Calliphoridae				
Lucilia (?) sp.	x	-	-	-
Anthomyiidae				
Atherigona orientalis Schiner	-	-	-	x
Coenosia sp.	-	-	-	x
Borboridae				
Undet. sp.	-	-	-	x
Psilidae				
Psila sp.	-	-	x	-
Ephydriidae				
Undet. sp.	-	-	-	x
Chloropidae				
Hippelates n. sp. (?)	-	-	-	x
Oscinella sp.	-	-	x	x
Undet. sp.	-	-	-	x
Drosophilidae				
Drosophila sp.	-	-	-	x
Undet. sp.	-	-	-	x
HYMENOPTERA				
Xyelidae				
Xyela sp.	-	-	x	-
Calliceratidae				
Conostigmus sp.	-	-	x	-
Diapriidae				
Xenotoma sp.	-	-	x	-
Braconidae				
Apanteles sp.	-	-	-	x
Ichneumonidae				
Amblyteles rubicundus (Cress.)	x	-	-	-
Ephialtes aequalis (Prov.)	x	-	-	-



Species collected	Spanish moss (La.)	Gin trash (Fla.)	Woods trash (S.C.)	Wild cotton (Fla.)
HYMENOPTERA (Con.)				
Chalcididae				
Spilochalcis torvina (Cress.) - - - -	x	-	-	-
Pteromalidae				
Zatropis n. sp. - - - - -	-	-	-	x
Eulophidae				
Clostocercus cinctipennis (Ashm.) - -	-	-	-	x
Scoliidae				
Camposomeris quadrimaculata (F.) - - -	-	-	-	x
Tiphidae				
Tiphia floridana Robt. - - - - -	-	-	-	x
Formicidae				
Camponotus caryae var. decipiens				
Emery - - - - -	x	-	-	-
Camponotus caryae subsp. discolor (Buckley) - - - - -	x	-	-	-
Camponotus caryae subsp. rasilis				
Whlr. - - - - -	x	-	-	-
Camponotus herculeanus pennsylvanicus				
Deg. - - - - -	x	-	-	-
Camponotus planatus Roger - - - - -	-	-	-	x
Crematogaster laeviuscula Mayr - - -	x	-	-	-
Crematogaster laeviuscula var. near clara Mayr - - - - -	x	-	-	-
Crematogaster sp. (queen) - - - - -	x	-	-	-
Monomorium minimum (Buckley) - - - -	x	-	-	-
Monomorium pharaonis (L.) - - - - -	-	-	-	x
Paratrechina (Nylanderia) sp. - - - -	-	-	x	-
Prenolepis imparis (Say) - - - - -	-	-	x	-
Tapinoma sessile (Say) - - - - -	x	-	-	-
Ponerine sp. - - - - -	-	-	-	x
Pseudomyrma flavicula F. Smith - - - -	-	-	-	x
Wasmannia auropunctata (Roger) - - - -	-	-	-	x
Bethyridae				
Epyris sp. - - - - -	-	-	x	-
Goniozus platynotae Ashm. - - - - -	x	-	-	-
Vespidae				
Polistes fuscatus (F.) - - - - -	x	-	-	-
Polistes fuscatus var. metricus Say -	x	-	-	-
Vespula squamosa (Drury) - - - - -	x	-	-	-
Hylaeidae				
Colletes thoracica Smith - - - - -	x	-	-	-
Halictidae				
Halictus ashmeadii Robt. - - - - -	-	-	x	-